

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of determining ~~the~~ an acoustical transfer impedance Z_t between a first position and a listening position of a human being, the method ~~comprising~~ comprising:

- generating an acoustical volume velocity Q in the listening ~~position~~, position;
- measuring a response quantity p at the first position resulting from the ~~volume-velocity Q~~ , velocity Q ; and
- determining ~~the~~ an acoustical transfer impedance Z_t as ~~the~~ a response quantity p divided by the acoustical volume velocity Q , $Z_t = p/Q$,

wherein the acoustical volume velocity Q is generated using a simulator simulating acoustic properties of at least a head of a human being, the simulator comprising a simulated human ear with an orifice in the simulated head and a sound source in the simulator for outputting the acoustical volume velocity Q through the orifice, so as to generate a sound field around the simulator that simulates a sound field around a human being.

2. (Previously Presented) A method according to claim 1, wherein the simulator simulates the head and a torso of a human being.

3. (Previously Presented) A method according to claim 1, wherein the simulator comprises a sound source in the interior of the simulator and a pair of microphones arranged to measure a pair of sound pressures in a canal leading from the sound source to the orifice, and that the method further comprises determining the volume velocity Q based on the pair of sound pressures.

4. (Previously Presented) A method according to claim 1, wherein the response quantity is sound pressure.

5. (Previously Presented) A method according to claim 1, wherein measuring the response quantity comprises at least one of measuring a sound pressure by at least one microphone and measuring structural vibrations by at least one vibration sensor.

6. (Currently Amended) A simulator ~~for use with the method according to claim 1~~ and simulating acoustic properties of at least a head of a human being, the simulator ~~comprising~~ comprising:

_____ a simulated human ear with an orifice in the simulated ~~head~~ head; and
_____ a sound source in the simulator for outputting ~~the~~ an acoustical volume velocity Q through the orifice, so as to generate a sound field around the simulator that simulates a sound field around a human being.

7. (Previously Presented) A simulator according to claim 6, wherein the simulator simulates the head and a torso of a human being.

8. (Previously Presented) A simulator according to any claim 6, wherein the simulator comprises two orifices simulating a left ear and right ear respectively of the simulated human being.

9. (Previously Presented) A simulator according to claim 8, wherein means are provided for selectively outputting sound signals through the simulated left ear or through the simulated right ear.

10. (Previously Presented) A simulator according to claim 6, wherein the simulator comprises means for measuring the sound output from the simulated ears.

11. (Previously Presented) A simulator according to claim 10, wherein the means for measuring the sound output from the simulated ears comprises a pair of microphones for measuring the output sound volume velocity.

12. (Canceled)

13. (Currently Amended) A simulator according to claim 6, further comprising:
~~for use with the method according to claim 3 and simulating acoustic properties of at least a~~
~~head of a human being, the simulator comprising a simulated human ear with an orifice in~~
~~the simulated head and a sound source in the simulator for outputting the acoustical volume~~
~~velocity Q through the orifice, so as to generate a sound field around the simulator that~~
~~simulates a sound field around a human being.~~

a pair of microphones arranged to measure a pair of sound pressures in a canal
leading from the sound source to the orifice,

wherein the simulator is adapted to determine the volume velocity Q based on
the pair of sound pressures; and

wherein the sound source is in the interior of the simulator.

14. (Currently Amended) A simulator according to claim 6, ~~for use with the~~
~~method according to claim 4 and simulating acoustic properties of at least a head of a human~~
~~being, the simulator comprising a simulated human ear with an orifice in the simulated head~~
~~and a sound source in the simulator for outputting the acoustical volume velocity Q through~~
~~the orifice, so as to generate a sound field around the simulator that simulates a sound field~~
~~around a human being.~~

wherein the simulator is adapted to:

generate the acoustical volume velocity Q in the listening position,

measure a response quantity p at the first position resulting from the
volume velocity Q, and

determine an acoustical transfer impedance Z_1 as a response quantity p
divided by the acoustical volume velocity Q, $Z_1 = p/Q$, and

wherein the response quantity p is sound pressure.

15. (Currently Amended) A simulator according to claim 14, wherein the simulator is adapted to measure at least one of a sound pressure by at least one microphone and structural vibrations by at least one vibration sensor. ~~for use with the method according to claim 5 and simulating acoustic properties of at least a head of a human being, the simulator comprising a simulated human ear with an orifice in the simulated head and a sound source in the simulator for outputting the acoustical volume velocity Q through the orifice.~~